OIPE IAP97
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PATENT & TRADEMARK OFFICE

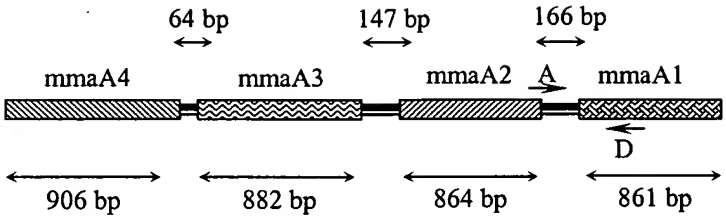

Fig. 1. Schematic diagram of methoxy mycolic acid synthase mmaA 4-mmaA 1 gene cluster of mycobacteria and location of forward A, and reverse D primers.

CTACTTCGCCAGCGTGAACTGGTTGACGTCGATGTAGCCGACCCGGAACAGCTTGGCGCAGCCGGTCA
GGTATTTCATGTACCGCTCGTAGACCTCTTCGGACTGGATCGCGATGGCCTCGCTTTTGTGTTCCTGCA
GCGCCTCGGCCCACAGGTCGAGGGTCCTGGCGTAATGCGGCTGCAGCGACTGGCGGCGAGTCAGCGT
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CGCGATCGCGCGCCGCATGGTGGCGCCCCAGCCGCAACCGATATCGAGCAGCGTCATGCCGGGCTGCA
GACCTAGCTTGCCCAGCGCCAGGTCGATCTTGGCGATCTGGGCCTCTTCCAGCGTCATGTCCTCGCGTT
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GTAGTGTGCCTGCACGTCCTCGAAGTGCGGCGTTAGGTC*GTTGACCATgaggtgtaatg*cctttccggaccctaggtggcct
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gggaacggatatgagcggacgagCTACTTGGTCATGGTGAACTGGGCGACGTTGATTAGGCCTCTGCGGAAGCGCT
CCGCGCATCCGGTCAGATAGTGCATGAAGTTGTTGTAGACCTCTTCGGACTGTACGGCGATGGCGCGT
TCGCGGGCAGCCTGTAGGTTGGCGGCCCATGCATC*GAGAGTCCGTGCGTAGTG*CTGCTGCAGCAGCTGG
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GCCCGGGAAGATCGACTCCCGCAGGAATTTGAGGAATCGAAGGTCGCTCATCGTCAGCGCAATGCCCT
GTTCGTGCAGCCACCTGCGGTCGTAGGTGAACAGGCTGTGCAGTAGCATCCGCCCGTCATCGGGCAGG
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GACGTCGTACTTCTCCACGGCCCGAACGAGCGCCCCGCCCCACCCGCAACCCACGTCGAGTAGCGTCA
TCCCCGGTTCGAGGTTCAGCTTGTCCAACGCCAGATCCACCTTGGCCAGTTGCGCCTCTTCCAGCGTCA
TATCGTCACGCTCGAAATAGGCGCAGGTGTAGACCCAGGTGGGATCGAGGAACAACGCGAAGAAGTC
ATCCGAAATGTCGTAAGCCGACTGTGACTCTTCGTAATATGGTCTCAGCTTGGCCAT

Fig. 2. Sequence of mmaA2 and mmaA1 gene with an intergenic region of 166 base pair (shown in lower case. Location of forward A, sequence ID 1 and reverse primer D, sequence ID 2. Both primer sequences are underlined and italicized.

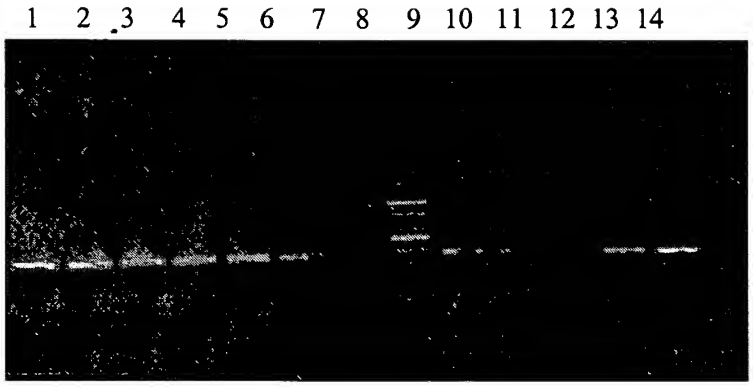

Fig. 3. PCR amplification of different mycobacterial genomic DNAs with primers A and D (lanes 1- 15): 1. *M.avium* 2. *M.bovis* 3. *M.chelonae* 4. *M.fortuitum* 5. *M.intracellulare* 6. *M.kansassi* 7. *M.phlei* 8. 100 bp DNA ladder 9. *M.marinum* 10. *M.scrofulaceum* 11.*M.smegmatis* 12. *M.szulgai,* 13. *M.tuberculosis* and 14. negative control. AD indicates 363 bp-amplified product.

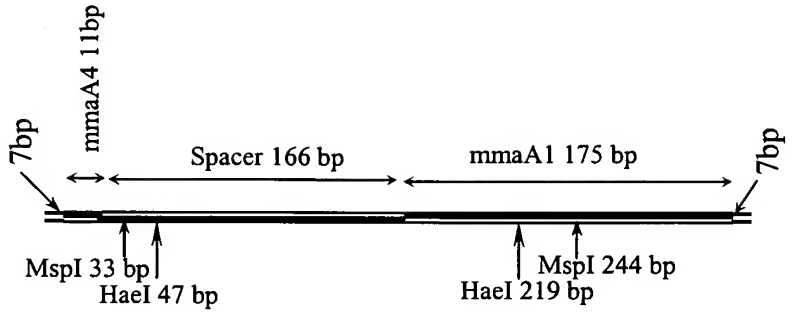

Fig. 4. Line diagram showing restriction endonuclease map of HaeI and MspI within AD.

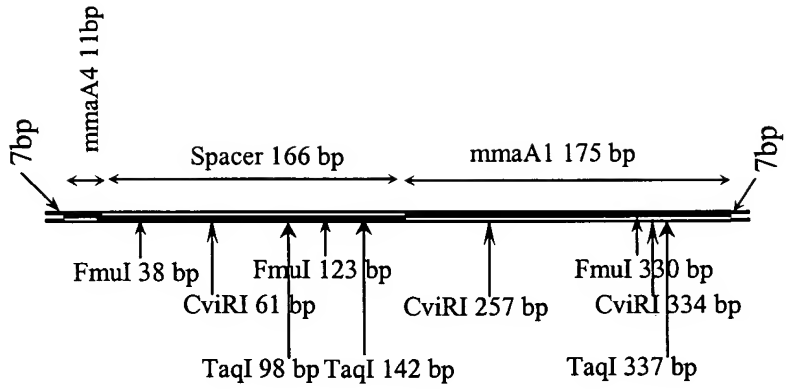

Fig. 5. Line diagram showing restriction endonuclease map of FmuI, CviRI and TaqI within AD.

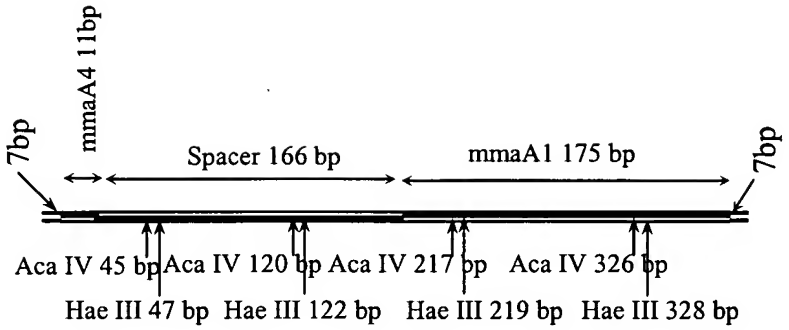

Fig. 6. Restriction map of AD showing distribution of the sites of restriction endonucleases AcaIV and HaeIII.

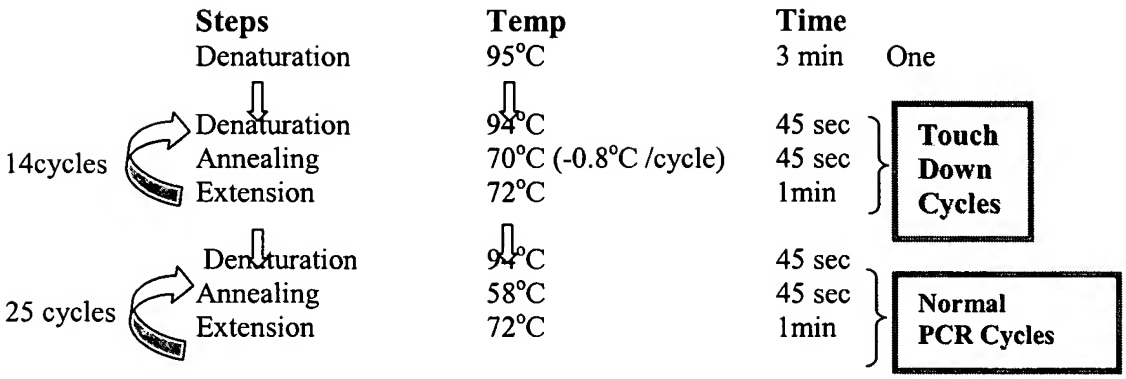

Fig. 7. Line diagram showing different steps of PCR reaction